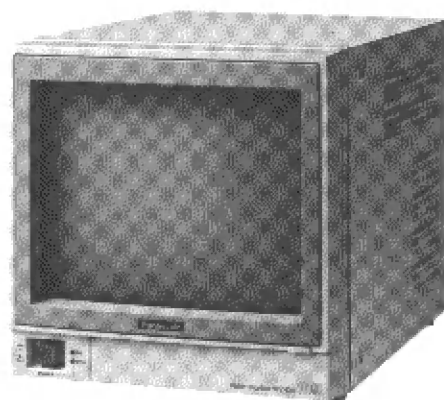


Operating Instructions

Color Video Monitor
WV-CM1000

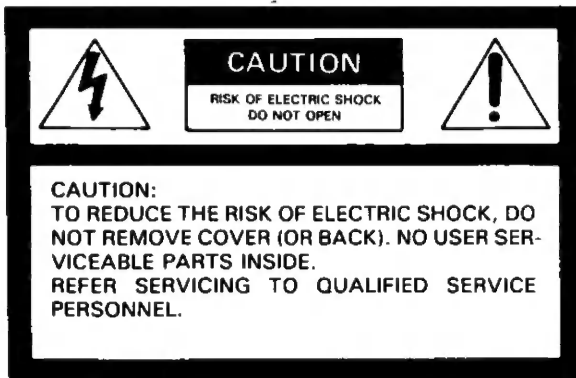


Panasonic®

Before attempting to connect or operate this product, please read these instructions completely.

CONTENTS

PREFACE	2
FEATURE	2
PRECAUTIONS	2
MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS	3
CABLE INFORMATIONS	4
SYSTEM CONNECTIONS	5
APPEARANCE	6
SPECIFICATIONS	6
STANDARD ACCESSORY	6
OPTIONAL ACCESSORY	6



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For U.S.A.
Warning:
This equipment generates and uses radio frequency energy and if not installed and used properly, i.e., in strict accordance with the instruction manual, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

For CANADA
This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

The serial number of this product may be found on the bottom of the unit.
You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. WV-CM1000

Serial No. _____

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

PREFACE

The WV-CM1000 is a PAL/NTSC/M-NTSC, high resolution color monitor to ensure high-defining picture quality. All controls except for power are covered with a push door to give a sleek appearance on the front. The master controls of Tint, Color, Brightness and Contrast are provided with sub controls to permit adjustment of preset levels. The ruggedly built metal cabinet is rack-mountable using optional bracket WV-Q52.

Standard BNC-type input and output connectors enables WV-CM1000 to be used with other CCTV monitors or Panasonic video tape recorder.

FEATURES

- Approx. 8-3/4" diagonal actual visual size.
- Switchable of AFC time constant
- Looping through BNC connectors for video input and output.
- Looping through RCA pin jack for audio input and output.
- PAL/NTSC/M-NTSC selectable.
- Max. 1.0W for speaker output
- Selectable of A or B channel for input and output signals.
- Rack-mountable using optional rack mount kit.

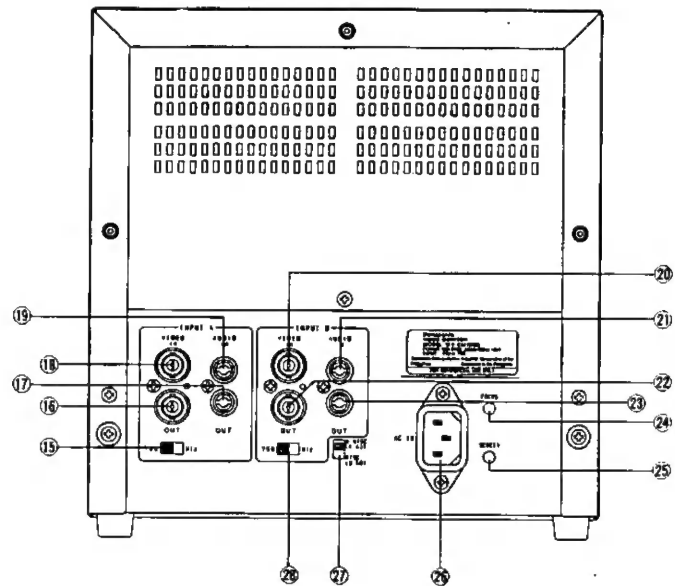
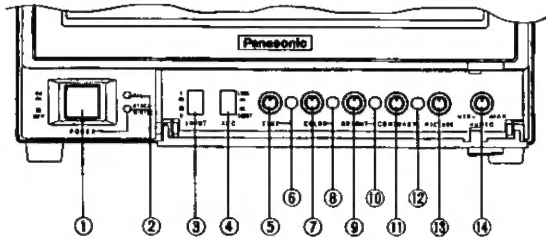
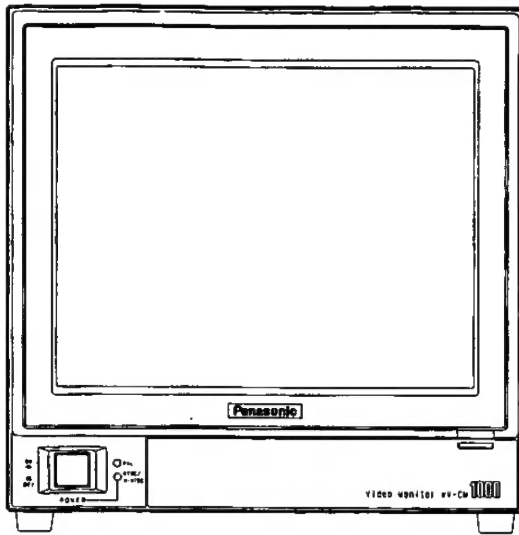
PRECAUTIONS

- Do not block the ventilation slots.
- Do place the video monitor at least 2 inches (5cm) apart from the wall.
- Do not expose the monitor to water or moisture.
- Do not operate the monitor if it becomes wet.
- Do take immediate action if ever the monitor does become wet. Turn power off and refer servicing to qualified service personnel. Moisture can damage the monitor and also create the danger of electric shock.
- Do not drop metallic parts through slots. This action could permanently damage the monitor. Do turn power off immediately and refer servicing to qualified service personnel.
- Do not attempt to disassemble the monitor. To prevent electric shock, do not remove screws or cover. There are no user serviceable parts inside. Refer servicing to qualified service personnel.
- Do not use the monitor beyond its temperature, humidity or power source ratings.
 - (a) Ambient temperature must not range beyond 14°F - 122°F (-10°C - +50°C).
 - (b) Avoid using the monitor when humidity is above 90%.
 - (c) The input power must be 100 - 240V AC 50/60Hz.

CAUTION:

Power cord of accessory is designed for use in 100 - 120V AC.
When operating this unit more than 120V AC, replace the power cord with the one approved by local safety regulation.

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS



1. Power Switch (POWER)

This is a push-push type switch which turns the power of the monitor on and off.
Press once and the switch remains down (■) for turning on the power of monitor.
Press again, the switch comes up (■) for turning off the power of the monitor.

2. Power Indicator/Broadcast System Indicator (PAL, NTSC/M-NTSC)

When turning on the power of this monitor without any input signals, PAL LED indicator lights in red.
These indicators are switched by the difference in the broadcasting system connected to this monitor

3. Input Signal Select Switch (INPUT A/B)

This is a push-push type switch which selects the signal input to A or B.
Press once and the switch remains down (■) for selecting the INPUT A signal.
Press again, the switch comes up (■) for selecting the INPUT B signal.

4. AFC Time Selection Switch (AFC, LONG/SHORT)

This is a push-push type switch which selects the AFC time. Press once and the switch remains down (■) for selecting the long horizontal (LONG). Press again, the switch comes up (■) for selecting the short horizontal (SHORT).

The short horizontal (SHORT) should be selected for the input signal, such as VTR playback.

5. Tint Control (TINT)

Turn this control clockwise for purplish color of the picture and turn this counterclockwise for greenish color of the picture.

6. Tint Subcontrol

This control is preset at the factory.

7. Color Control (COLOR)

Turn this control clockwise to increase the picture color.

8. Color Subcontrol

This control is preset at the factory.

9. Bright Control (BRIGHT)

Turn this control clockwise to increase the picture brightness.

10. Bright Subcontrol (BRIGHT)

This control is preset at the factory.

11. Contrast Control (CONTRAST)

Turn this control clockwise to increase the picture contrast.

12. Contrast Subcontrol

This control is preset at the factory.

13. Picture Adjustment (PICTURE)

Turn this control clockwise for sharp picture and turn this control counterclockwise for soft picture.

14. **Audio Volume (AUDIO, MIN/MAX)**
The audio level can be adjusted by turning this volume.
15. **Video Termination Switch (INPUT A - 75Ω/HI-Z)**
When bridging or looping through the video signal, set this switch to HI-Z position, and other cases this switch should be set to 75 Ω position.
16. **Video Output Connector (INPUT A - VIDEO OUT)**
The video input signal connected to the Video Input Connector (18) is looped through to this connector.
17. **Audio Output Connector (INPUT A - AUDIO OUT)**
The audio input signal connected to the Audio Input Connector (19) is looped through to this connector.
18. **Video Input Connector (INPUT A - VIDEO IN)**
This input accepts a composite PAL/NTSC/M-NTSC video signal.
19. **Audio Input Connector (INPUT A - AUDIO IN)**
—10dB/HI-Z audio signal can be supplied to this input connector.
20. **Video Input Connector (INPUT B - VIDEO IN)**
This input accepts a composite PAL/NTSC/M-NTSC video signal.
21. **Audio Input Connector (INPUT B - AUDIO IN)**
—10dB/HI-Z audio signal can be supplied to this input connector.
22. **Video Output Connector (INPUT B - VIDEO OUT)**
The video input signal connected to the Video Input Connector (20) is looped through to this connector.
23. **Audio Output Connector (INPUT B - AUDIO OUT)**
The audio input signal connected to the Audio Input Connector (19) is looped through to this connector.
24. **Focus Control (FOCUS)**
This control is preset at the factory.
25. **Screen Control (SCREEN)**
This control is preset at the factory.
26. **AC Inlet (AC IN)**
Connect power cord in here.

CAUTION:

Power cord of accessory is designed for use in 100 - 120V AC.
When operating this unit more than 120V AC, replace the power cord with the one approved by local safety regulation.

27. **NTSC/M-NTSC Selection Switch (NTSC/M-NTSC)**
When connecting a VTR providing the modified NTSC (4.43 MHz NTSC) signal to this monitor, set this switch to M-NTSC position.
When connecting a camera or VTR providing NTSC (3.58 MHz NTSC) signal to this monitor, set this switch to NTSC position.
The selection between PAL and M-NTSC/NTSC mode is performed automatically.
28. **Video Termination Switch (INPUT B, 75Ω/HI-Z)**
When bridging or looping through the video signal, set this switch to HI-Z position, and other cases this switch should be set to 75 Ω position.

CABLE INFORMATIONS

Power Cable

1. Keep the Power Switch (1) in the OFF position during installation.
2. Connect the Power Cord to a grounded electrical outlet.

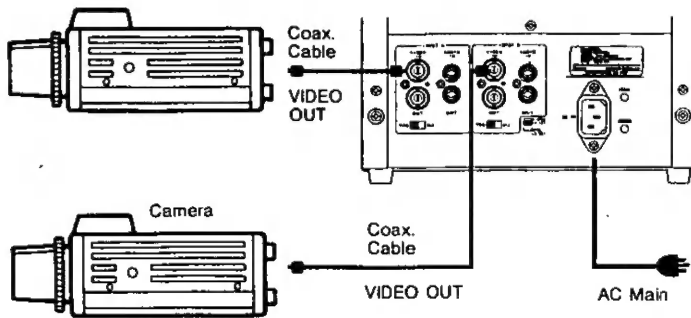
Video Cable

1. Use 75-ohm coaxial cable. [RG-59/U (3C-2V), RG-6/U (5C-2V), RG-14/U (7C-2V), RG-15/U (10C-2V)]
2. Up to 10 monitors can be hooked up in this configuration before signal loss occurs. Total cable length should not exceed 500 feet (150m).
3. Wiring Precautions:
 - Do not bend coaxial cable into a curve whose radius is smaller than 10 times of its diameter:
 - Never crush or pinch the cable.
 All these will change the impedance of the cable and cause poor picture quality.

Type of coaxial cable		RG-59/U (3C-2V)	RG-6U (5C-2V)	RG-11/U (7C-2V)	RG-15/U (10C-2V)
Recommended maximum cable length	(ft)	825	1,650	1,980	2,640
	(m)	250	500	600	800

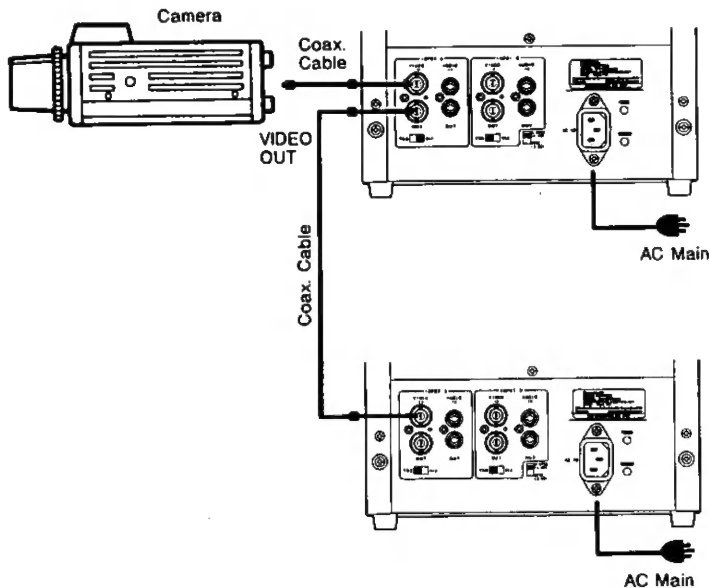
SYSTEM CONNECTIONS

1. Single Monitor Connection



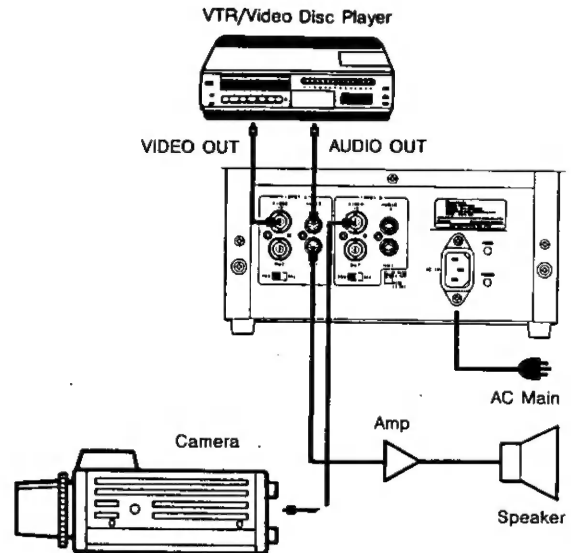
- Connect the Video Output terminal of the camera or VTR to the Video Input Connector (18) or (20) of the monitor with 75-ohm coaxial cable.
- Set the Video Termination Switch (15) or (28) to 75 Ω position.

2. Multiple Monitor Connection



- Connect the Video Output terminal of the camera or VTR to the Video Input Connector (18) or (20) of the video monitor with 75-ohm coaxial cable.
- Connect the Video Output Connector (16) or (22) on the first monitor to the Video Input Connector (18) or (20) on the second monitor with 75-ohm coaxial cable continue until all monitors are connected.
- Set the Video Termination Switch (15) or (28) of the first and intermediate monitors to Hi-Z position. Then set the Video Termination Switch (15) or (28) of the last monitor to 75 Ω position.

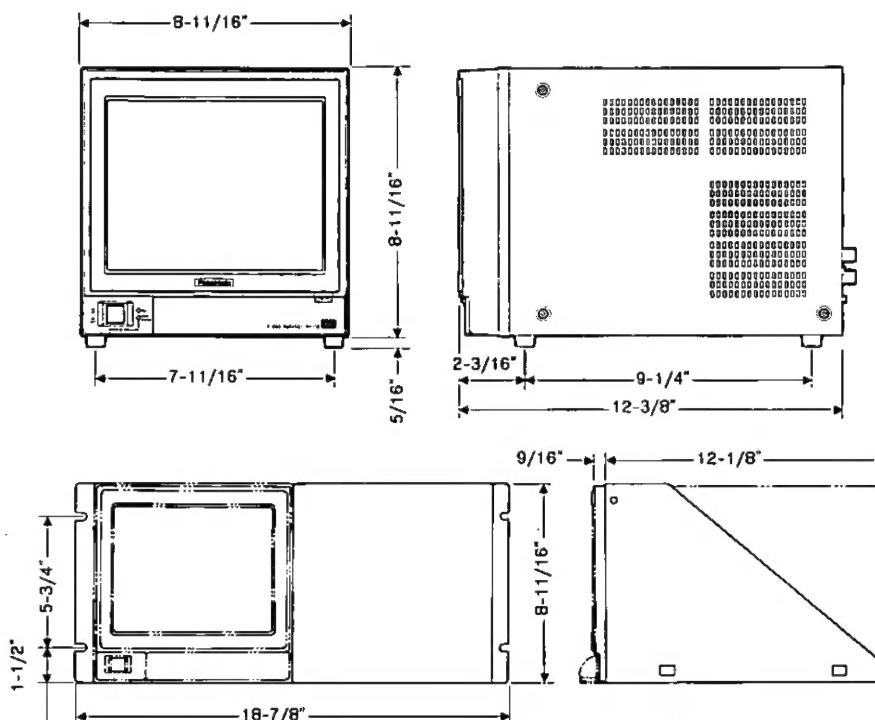
3. Audio Circuit Signal



- Connect the Video Out Terminal of VTR or camera to the Video Input Connector (18) or (20) on this monitor with 75-ohm coaxial cable.
- Connect the Audio Out Terminal of VTR to the Audio Input Connector (19) or (21) of this monitor and connect the Audio Input Terminal of the audio amplifire to the Audio Output Connector (17) or (23) of this monitor with 75-ohm coaxial cable.
- Set the Video Termination Switch (15) or (28) to 75 Ω position.

APPEARANCE

Unit: inch



SPECIFICATIONS

Power Source:	100 - 240V AC 50/60Hz
Power Consumption:	Approx. 49 watts
Video Input/Output:	1.0/Vp-p composite/75 Ω or Hi-Z looping through
Sweep Linearity:	Less than 5%
Sweep Geometry:	Less than 2%
Scanning Size:	Approx. 8% (Overscanning)
Tube Size:	8-3/4" diagonal actual visual size (10" diagonal screen size)
Audio Input/Output:	- 10dB/Hi-Z
Switchable AFC Speed:	SHORT/LONG
Ambient Operating Temperature:	14°F - 122°F (-10°C - +50°C)
Ambient Operating Humidity:	Less than 90%
Dimensions:	8-11/16" (W) \times 9" (H) \times 12-3/8" (D) 220 (W) \times 228.5 (H) \times 315 (D) mm
Weight:	16.3 lbs. (7.4kg)

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

STANDARD ACCESSORY

Power Cord 1 pc.

OPTIONAL ACCESSORY

Rack Mount Kit WV-Q52

Panasonic

Communications & Systems Company

Panasonic Communications & Systems Company

Division of Matsushita Electric Corporation of America

CLOSED CIRCUIT VIDEO EQUIPMENT DIVISION

HEADQUARTERS:

50 Meadowland Parkway, Secaucus, New Jersey 07094

EASTERN ZONE:

50 Meadowland Parkway, Secaucus, NJ 07094 (201) 348-7620

CENTRAL ZONE:

425 E. Algonquin Road, Arlington Hts. IL 60005 (708) 981-4826

SOUTHERN ZONE:

Dallas Region: 4500 Amon Carter Blvd., Ft. Worth, TX 76155 (817) 685-1117

Atlanta Region: 1854 Shackleford Ct. Suite 115, Norcross, GA 30093 (404) 925-6841

WESTERN ZONE:

Seattle Region: 1200 Westlake Ave. N., Suite 508, Seattle, WA 98109 (206) 285-8883

Los Angeles Region: 6550 Katella Ave., Cypress, CA 90630 (714) 373-7275

MATSUSHITA ELECTRIC OF CANADA LIMITED

5770 Ambler Drive, Mississauga, Ontario, Canada L4W 2T3 (416) 624-5010

PANASONIC SALES COMPANY

DIVISION OF MATSUSHITA ELECTRIC OF PUERTO RICO, INC.

San Gabriel Industrial Park, 65th Infantry, Ave. KM. 9.5 Carolina, Puerto Rico 00630 (809) 750-4300